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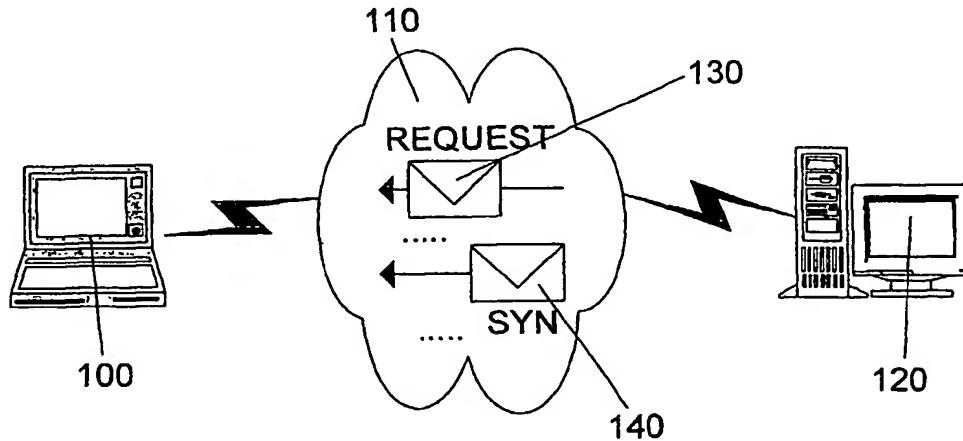
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(54) Title: DATA COMMUNICATION SYSTEM AND METHOD



(57) Abstract: A data communications method and system is disclosed in which the transmission control protocol (TCP) is used for data communications. In order to provide security against denial of service attacks and the like, a connection negotiation phase is required before the TCP handshake. Without a successful connection negotiation, a TCP handshake is unable to complete thereby preventing connection.

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## INTERNATIONAL SEARCH REPORT

PCT/GB 03/05345

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H04L29/06

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX, IBM-TDB

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>T. AURA, P. NIKANDER, AND J. LEIWO, : "DOS-Resistant Authentication with Client Puzzles" PROC. SECURITY PROTOCOLS WORKSHOP 2000; SPRINGER-VERLAG, 'Online! 2000, pages 170-177, XP002275098 New York Retrieved from the Internet: &lt;URL: http://citeseer.ist.psu.edu/aura00dos resistant.html&gt; 'retrieved on 2004-03-25! paragraphs '0001!, '0003!, '0004!</p> <p>US 2002/073322 A1 (KIM JUNG-JOON ET AL) 13 June 2002 (2002-06-13) abstract paragraphs '0001!-'0018!, '0028!, '0029!, '0037!-'0041!, '0053!-'0055!</p> <p>---</p> <p>-/-</p>	1-17
X		1-17

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

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- \*&\* document member of the same patent family

Date of the actual completion of the International search

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## INTERNATIONAL SEARCH REPORT

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>STEVENS; W R : "TCP/IP ILLUSTRATED, Vol. 1. THE PROTOCOLS" 1994, TCP/IP ILLUSTRATED. VOL. 1 : THE PROTOCOLS, PROFESSIONAL COMPUTING SERIES, READING, MA : ADDISON WESLEY, US, VOL. 1, PAGE(S) 229-233, 240-243 XP002275099 ISBN: 0-201-63346-9</p> <p>page 229 page 231 -page 232 page 240 -page 242</p> <p>---</p>	14,15
X	<p>SCHUBA C L ET AL: "Analysis of a denial of service attack on TCP" SECURITY AND PRIVACY, 1997. PROCEEDINGS., 1997 IEEE SYMPOSIUM ON OAKLAND, CA, USA 4-7 MAY 1997, LOS ALAMITOS, CA, USA, IEEE COMPUT. SOC, US, 4 May 1997 (1997-05-04), pages 208-223, XP010230160 ISBN: 0-8186-7828-3</p> <p>page 208-214</p> <p>---</p>	1-17
X	<p>US 2001/042200 A1 (LAMBERTON MARC ET AL) 15 November 2001 (2001-11-15)</p> <p>abstract; figures 1,7</p> <p>paragraphs '0001!, '0004!-'0009!</p> <p>---</p>	1-17

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

PCT/GB 03/05345

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
US 2002073322	A1 13-06-2002	KR	2002045003 A	19-06-2002
US 2001042200	A1 15-11-2001	EP TW	1154610 A2 518864 B	14-11-2001 21-01-2003